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LAW OFFICES  
BLOOSTON, MORDKOFKY, JACKSON & DICKENS  
2120 L STREET, NW  
WASHINGTON, DC 20037

ORIGINAL

HAROLD MORDKOFKY  
BENJAMIN H. DICKENS, JR.  
JOHN A. PRENDERGAST  
GERARD J. DUFFY  
RICHARD D. RUBINO  
MARY J. SISAK  
D. CARY MITCHELL  
MICHAEL B. ADAMS, JR.  
SARAH LEEPER \*

(202) 659-0830  
FACSIMILE: (202) 828-5568

AFFILIATED SOUTH AMERICAN OFFICES

ESTUDIO JAUREGUI & ASSOCIATES  
BUENOS AIRES, ARGENTINA

ROBERT M. JACKSON  
OF COUNSEL

PERRY W. WOOFER  
LEGISLATIVE CONSULTANT

EUGENE MALISZEWSKYJ  
DIRECTOR OF ENGINEERING  
PRIVATE RADIO

SEAN A. AUSTIN  
DIRECTOR OF ENGINEERING  
COMMERCIAL RADIO

November 9, 2000

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OFFICE OF THE SECRETARY

ARTHUR BLOOSTON  
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\* ADMITTED ONLY IN CALIFORNIA  
SUPERVISION BY JOHN PRENDERGAST,  
A MEMBER OF THE DC BAR

WRITER'S CONTACT INFORMATION  
(202) 828-5540

Magalie R. Salas, Secretary  
Office of the Secretary  
Federal Communications Commission  
Washington, D.C. 20554

Attention: Patrick Forster, Senior Engineer (3-A104)  
Policy Division  
Wireless Telecommunications Bureau

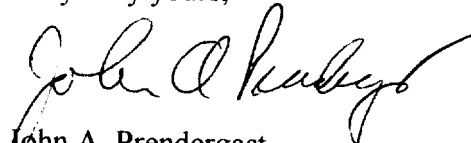
Re: North Dakota Network Co,  
Implementation Plans of Wireless E911 Phase II Automatic  
Location Identification  
Notice Pertaining to CC Docket No. 94-102

Dear Ms. Salas:

On behalf of North Dakota Network Co., we are submitting herewith its Report on  
Implementation of Wireless E911 Phase II Automatic Location Identification.

Please direct any questions or correspondence regarding this filing to our office.

Very truly yours,

  
John A. Prendergast  
D. Cary Mitchell

Attachment

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**NORTH DAKOTA NETWORK CO.**  
**3615 North Broadway**  
**Minot, ND 58702**

Magalie R. Salas, Secretary  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

**Attention: Patrick Forster, Senior Engineer (3-A104)**  
**Policy Division**  
**Wireless Telecommunications Bureau**

**Re: Implementation Plans of Wireless 911 Phase II Automatic**  
**Location Identification**  
**Notice Pertaining to CC Docket No. 94-102**

**E911 PHASE II STATUS REPORT**

Dear Ms. Salas:

In accordance with the Third Report and Order in Docket No. 94-102 and the Commission's related Public Notice, Mimeo No. DA00-2099 (released September 14, 2000), we hereby submit our report on the status of implementation plans for Wireless 911 Phase II Automatic Location Information, as follows:

Background/Contact Information

- 1) Carrier Identifying Information: North Dakota Network Co.  
TRS Number: 816412
- 2) Contact Information: John Prendergast, Esq.  
Blooston, Mordkofsky, Jackson & Dickens  
2120 L Street, N.W., Suite 300  
Washington, D.C. 20037  
Tel. (202) 659-0830  
Fax (202) 828-5568

## **E911 Phase II Location Technology Information**

Response to Item Nos. 1 – 7, DA00-2099.

1. **Type of Technology:** North Dakota Network Co. holds the licenses for Broadband Personal Communications Service stations KNLF939 (Bismarck, ND BTA 045, Block-F), KNLH231 (Fargo, ND BTA 138, F-Block), KNLH234 (Minot, ND BTA 299, F-Block), KNLH232 (Minot, ND BTA 299, D-Block) and KNLH233 (Minot, ND BTA 299, E-Block). The five-year construction deadline for these licenses does not expire until April 28, 2002. The Phase II compliance status for each of these systems is as follows:

**KNLF939, KNLH231, and KNLH233:** These systems have not yet been constructed. We are in the process of seeking Commission approval to assign these licenses to other qualified entities. The applications for approval have either been filed (for KNLH233), or will be filed imminently. E911 compliance will be the responsibility of the assignees, once the systems are constructed.

**KNLH234:** We recently activated the F-Block Minot license (KNLH234), and are providing service to the public which is E911 Phase I capable. This system is operating using CDMA technology. We have decided to use a handset solution to implement E911 Phase II capability.

We have monitored the progress of the various Phase II E911 technologies under development, and have obtained, through our consultants, basic information concerning network-based vendors such as Allen Telecom/Grayson Wireless Division, Cell-Loc, Inc./Times Three, Inc., TruePosition, Inc., U.S. Wireless Corp., and XYPOINT Corporation. However, we are concerned about the high cost of a network solution, as well as the problems associated with the use of triangulation and similar techniques in a rural setting, where towers are widely spaced and may be separated by uneven terrain. Moreover, it is our understanding that "time difference of arrival" techniques suffer skewed results when repeaters are used to lengthen the reach of a base station's coverage. We rely on the use of such repeaters as an economical way to extend our signal to areas blocked by terrain, or which do not otherwise justify the cost of an additional base station. Nortel Networks, our network vendor, has not yet provided us with information about the feature sets needed for the base transceiver station, base station controller and DMS 100w switching platform that we would use in implementing a network-based solution. Nortel has indicated that the delay is due to a lack of standards for E911 Phase II compliance. Based on these considerations, we believe that a handset solution is the best method of achieving compliance with the Phase II requirements in our rural service area.

While we have performed a considerable amount of investigation into available handset technology, we are not yet able to choose a particular vendor. Our decision making process has been hampered by the scarcity of pricing and delivery information for handset ALI technology. We are aware that the manufacturers are still in the process of developing their product, and determining demand; and we expect that they will be able to provide us with the necessary information well before we receive a PSAP request for Phase II capability. However, as of the filing of this report, we have been unable to get the basic price and availability information needed to make a vendor choice.

In particular, we have contacted Brightpoint, the distributor that supplies Nokia handsets in our region, and we have received no indication that Nokia is prepared to supply Phase II-compliant handsets by the applicable deadline. Efforts to gain information directly from Nokia have not been productive, since Nokia continues to send us to their regional distributor.

We have also contacted CellStar, the regional distributor for Motorola and Kyocera handsets, and we have received no information at all. It appears from our dealings that the distributor is unfamiliar with the Phase II E911 requirements. We attempted to obtain Phase II compliance information directly from Motorola, but have not yet received a response. We received limited information last week that Kyocera may have a Phase II handset available sometime in 2002, if sufficient demand develops. Unfortunately, we cannot plan around such uncertainty, and the timetable is after the Commission's October 1, 2001 deadline for making Phase II handsets available to new activations. We are still in the process of obtaining information from Snaptrak.

North Dakota Network Co. is a subsidiary of Souris River Telephone Cooperative, Inc., a rural telephone company, and will be providing PCS service primarily to rural or non urbanized communities. Because of the higher per pop cost of a rural buildout, and reduced expectation of revenues (due to lower population density), we must be careful in choosing the Phase II technology that we will use. Without information about the price and availability of the equipment, we cannot responsibly choose a handset vendor. And without reliable indications as to delivery, we cannot determine whether the chosen vendor will put us in a position to achieve compliance. We realize that all of these handset vendors are primarily concerned with addressing the needs of the largest carriers, which are their most valuable customers. However, this fact, coupled with the Commission's decision to require handset solutions to be in place by October 2001 without regard to whether a PSAP can utilize the Phase II capability, has placed rural carriers in a difficult position. To the extent deemed necessary, we request a waiver of the November 9, 2000 report deadline, to the extent that it can be interpreted as requiring a choice of a particular vendor by that date. As discussed below, the PSAP in our service area is not close to being able to use Phase II information.

We realize that all of the above products are still under development, and we expect that substantial progress will be made over the next 6 to 12 months. Once we are able to receive reliable information from the major handset vendors, we will choose and implement a handset solution.

**KNLH232:** This system is not yet constructed. We have not yet determined the technology that will be used in the build-out of this PCS spectrum in Minot, or whether we will use a network based or handset based solution to comply with the E911 ALI Phase II requirement. At this time, we are evaluating the provision of fixed data service on this channel block using Airspan technology. We have been advised that the Airspan technology is already capable of providing the exact street address of the subscriber placing a 911 call, using technology similar to wireline 911 service. If this technology is used, PSAPs will be provided with information more accurate than the Phase II technology, making approximate geographic coordinate information unnecessary.

Once such a technology is chosen for KNLH232, we will file a supplemental report which will indicate the type of technology, as well as the equipment vendor, timetable for deployment, and program to ensure a successful implementation. Such report will be filed within 30 days of our implementation decision, in accordance with Rule Section 20.18(i).

2. **Testing and Verification Method:** Testing to verify the Phase II capability will be conducted in accordance with the Empirical Testing Method per OET Bulletin No. 71 and the equipment manufacturer's requirements.
3. **Implementation Details and Schedule:** In order to ensure that we timely achieve compliance with the Commission's E911 requirements, we will promptly review the status, pricing and availability of all Phase II handset technologies as soon as this information is provided by the major vendors, and evaluate their effectiveness and feasibility based on the CDMA signaling format we have chosen. If we affiliate with other carriers based on our choice of format, the Phase II solution chosen by the affiliated carriers will be factored into our evaluation. We will also consult with industry sources, especially other rural telephone companies engaging in the provision of PCS, to determine which handsets work best for rural areas. We will then decide on a vendor and proceed to implement the chosen solution in accordance with the Commission's Rules.
4. **PSAP Interface:** It is anticipated that the PSAP will require appropriate software in order to utilize the Phase II capability. Once an equipment vendor is chosen, we will work closely with the vendor and the PSAP to help ensure that an interface is achieved. We are currently providing Phase I-compliant information to the PSAP via E911 trunks, even though the PSAP is not yet capable of using the information, and

are working with the PSAP to help it achieve this capability. We will likewise proactively cooperate with the PSAP on Phase II. The PSAP has indicated that it uses the Motorola/Centralink equipment for 911 interface, and has requested that Motorola upgrade its system to incorporate Phase I E911 capability. This upgrade was to have been implemented in December 1999, but to date has not been done. Again, it appears that limited resources delay the implementation of newer technologies in rural areas. Therefore, it appears that the PSAP will be unable to utilize Phase II information for several months or more than one year.

5. **Upgrading Existing Handsets:** Once the Phase II capability is implemented, it is contemplated that we will use customer mailings, bill inserts, store promotions and similar efforts to make our customers and potential customers aware of the availability and benefits of Phase II capability, and to encourage the upgrading of existing handsets. Depending on the timing of our activation of service on KNLH232, and related PSAP requests, our second system may be Phase II compliant from the initiation of service, in which case it is expected that virtually all customers placed on the system will be Phase II compliant. This is especially likely if we deploy fixed service on this system, as described above.
6. **Location of Non-Compatible Handsets:** As described above, customer mailings and promotions will be used in an attempt to encourage the upgrading of non-compliant handsets. Several months in advance of the December 31, 2005 deadline for ensuring that 95 percent of all handsets are Phase II compliant (as prescribed by the Commission's Fourth Memorandum Opinion and Order, CC Docket No. 94-102, FCC 00-326, released September 8, 2000), we will advise all customers that we will no longer support the maintenance and repair of handsets that are not Phase II capable, and we will offer incentives to identify and replace the few remaining phones that are non-compliant.
7. **Other Information:** Because we have not implemented service, we have not received any PSAP Phase I or Phase II requests, with respect to our PCS system, to date. In this regard, we are aware of no other areas of the state within our service area that have deployed E911 Phase I or Phase II.

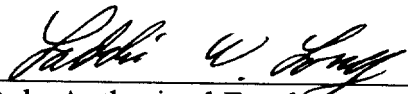
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Upon the commencement of service to the public, we stand ready to implement E911 ALI Phase II in accordance with the Commission's Rules. We will remain in contact with our local PSAP, and as necessary will update this report to keep the Commission apprised of our progress.

Respectfully submitted,

**NORTH DAKOTA NETWORK CO.**

By

  
Duly Authorized Employee

Dated: November 8, 2000